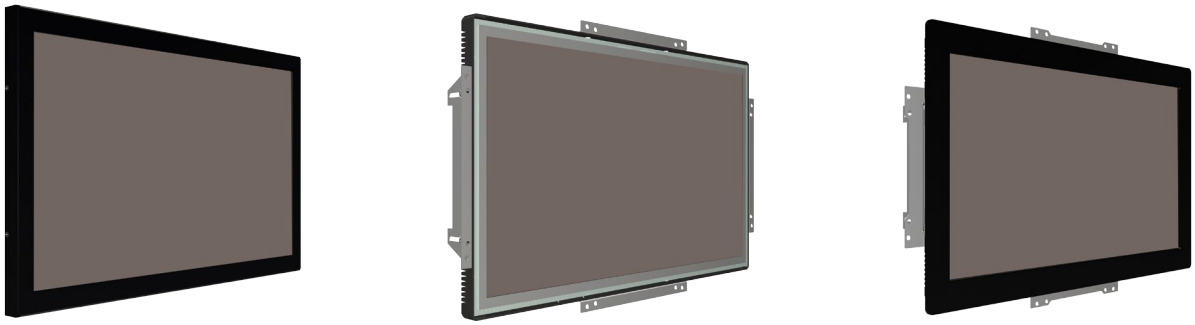
User Manual

POS-Line Series



POS-Line Monitors from 26 cm (10.4“)
to 68 cm (27“)

DATA DISPLAY GROUP

201501_Manual_POS_Line_small_EN.pdf

Scope of Document

This user manual is valid for POS-Line monitors up to 68 cm (27”). The POS-Line monitors are offered in different screen sizes and with various controllers and other options.

Important note: This user manual is complemented by other additional documents when indicated.

All documents are also available for download from Data Display Group web site: www.datadisplay-group.com.

POS-Line monitor versions:

POS-Line Video P-ECOIII	Monitor with integrated AD converter board, 1 x RGB, 1 x DVI
POS-Line Video PME:	Monitor with integrated AD converter board, 1 x RGB, 1 x HDMI, 1 x Display Port
POS-Line Video PIII:	Monitor with integrated AD converter board, 1 x RGB, 1 x DVI, S-Video, Composite Video
POS-Line IQ Ontario:	Monitor with integrated PC board AMD Ontario, T56N CPU, 2 x 1.6 GHz
POS-Line IQ Core-i:	Monitor with integrated PC board Intel Core i5/i7
POS-Line VideoPoster:	Monitor with integrated network media player for video play lists

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1. Declaration of Conformity

CE

EC Declaration of Conformity

Address:	Distec GmbH Augsburger Str. 2B 82110 Germering, Germany
Product:	POS-Line display series Video-PECOIII, Video-PME, Video-PIII, IQ Ontario, IQ Core-i, VideoPoster
Model:	10.4": DS-91-451; DS-91-455; DS-91-577; DS-91-629 15.0": DS-91-305; DS-91-311; DS-91-317; DS-91-405; DS-91-564; DS-91-584; DS-91-630; DS-91-634; DS-91-635 17.0": DS-91-306; DS-91-312; DS-91-318; DS-91-406; DS-91-565; DS-91-585; DS-91-586; DS-91-636; DS-91-637; DS-91-654 17.3": DS-91-591; DS-91-592; DS-91-593; DS-91-594; DS-91-595; DS-91-640; DS-91-641 19.0": DS-91-307; DS-91-313; DS-91-319; DS-91-407; DS-91-566; DS-91-631; DS-91-638; DS-91-639 21.5": DS-91-309; DS-91-315; DS-91-321; DS-91-409; DS-91-567 23.0": DS-91-310; DS-91-316; DS-91-322; DS-91-410; DS-91-568

The product is in compliance with the requirements of the following European directives:

Main Unit:

2004/108/EG	Electromagnetic Compatibility (EMC)
2006/95/EG	Low Voltage Directive (LVD)
2011/65/EU	Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

RF Unit (displays with WLAN only):

1999/5/EG	Radio and Telecommunications Terminal Equipment (R&TTE)
)**2011/65/EU**	Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

The compliance with the requirements of the European Directives was proved by the application of the following harmonised standards:

Main Unit

EMV	EN 55022:2010 +AC:2011 EN 55024:2010 EN 61000-3-2:2006 +A1:2009 +A2:2009 EN 61000-3-3:2008
NSR	EN 60950-1:2006 +A11:2009 +A1:2010 +AC:2011 +A12:2011
RoHS	EN 50581:2012

Year of CE marking	2013
RF Unit (displays with WLAN only):	
R&TTE	EN 301 489-1 V1.9.2 (2011-09) EN 301 489-17 V2.2.1 (2012-09) EN 300 328 V1.8.1 (2012-06)
NSR	EN 60950-1:2006 +A11:2009 +A1:2010 +AC:2011 +A12:2011
Exposition von Personen	EN 62479:2010
RoHS	EN 50581:2012

The object of the declaration described above is in conformity with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Germering, 19.12.2013

Werner Schubert, Geschäftsführung

FCC-Declaration of conformity

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian Department of Communications Compliance Statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Observation des normes-Class A - Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC Information:

- Changes or modifications not expressly approved by Distec GmbH could void the user's authority to operate the equipment.
- Use the attached specified cables with the POS-Line monitor so as not to interfere with radio and television reception.
- Please use the supplied power cord or equivalent to ensure FCC compliance.
- Please use the supplied shielded video signal cable, Mini D-SUB 15 pin to Mini D-SUB.

2. Symbols

Indicates compliance with the guidelines of the European Economic Council and with the official journal of normalised standards published by the European Community.

Electric and electronic devices may not be disposed of in ordinary waste but in separate take-back system as hazardous waste.

3. General Safety Regulations

Safety information

Please read this safety information carefully for your personal safety and for the prevention of property damage.

In case of a malfunction, immediately disconnect the power plug and contact your dealer or the next Data Display Group service centre. A malfunction is also considered if the housing, a control element or cable is damaged or if liquids or other objects penetrate the monitor.

Please read the safety information carefully before enhancing the device. If you have any doubts about whether the device may be used in a particular environment, please contact our service partner.

Repairs

Repairs may only be carried out by authorized technical personnel. Unauthorized access or improper repairs might cause serious property damage or cause danger to the user. In addition to that, any legitimate warranty claim expires.

Electrical connection

Disconnect the monitor from socket before executing any work. Do not touch or connect data cables or power cables during thunderstorms.

System start-up

Before the system start-up let the monitor adjust to the room temperature. Do not expose the device to direct heat sources. In case of condensation, please wait a minimum of 12 hours before switching on the monitor. The monitor shall only be installed and used according to this documentation data sheets. Only qualified personnel may perform the initial installation and system setup.

Qualified personnel

Qualified personnel, in terms of the safety information of this documentation, are persons who are qualified to activate, ground and label devices, systems and circuits according to the safety standards.

Operation

For a proper and safe utilization of the product, adequate transportation, storage, installation, assembly, careful handling and maintenance are essential. The device is only certified for in-door operation. Extreme ambient conditions shall be avoided and the monitor shall be protected from dust, humidity and heat. Do not expose the monitor to direct sunlight.

Transport

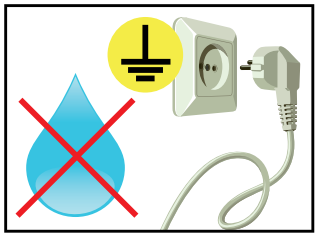
Unpack the monitor at the place of installation. Use only original packaging for transportation. Please observe these rules for any later transport.

Condensation

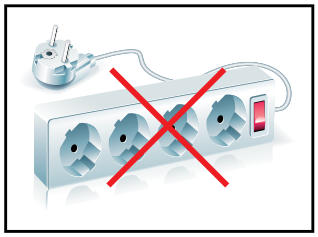
Avoid condensation during transport at low temperatures or at extreme fluctuations of temperature.

Safety guidelines for the handling of LCD monitors

- If the device is not used for a long period of time, unplug the power cable.
- Unplug the power cable only in emergencies while the device is switched on.
- To unplug the device without problems, sockets have to be easily accessible.
- Ensure that the power cable does not get pinched or kinked.
- Do not place heavy objects on the power cable.

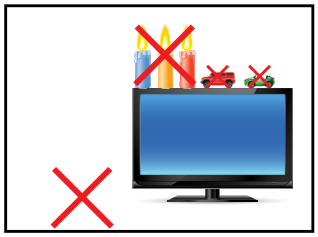


- Do not use damaged or loose sockets to plug in the device.
- Plug the device in earthed sockets only.
- Operate the device with the power cables included in the delivery packet only.
- Use undamaged power cables only.
- When plugging in and out, do not touch the power cable with wet hands.
- Ensure that the power cable is plugged in the socket safely and correctly.
- Use for devices with external power supply only the supplied original power supply, or an equivalent Low Power Source (LPS).

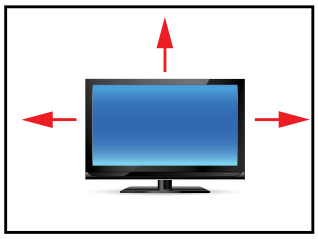


- Do not use extension block to plug several devices into a single socket.

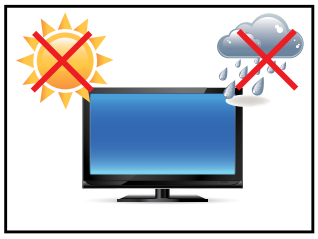
- According to the size, devices may be unhandy and very heavy. Ensure that at least two people lift and carry the device.
- Put down the device slowly and carefully to avoid damaging the LCD screen. Ensure that the device stands stable.
- Keep packaging away from children. Danger of suffocation!
- Use our specified and professionally mounted wall mounting only.



- Do not put objects onto the device.
- Do not place candles, heaters or humidifier near the device.
- Keep the device away from fireplaces and flammable materials.

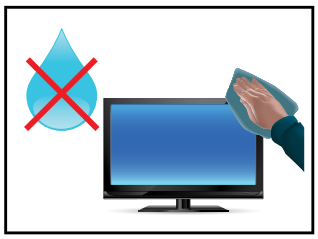


- Ensure sufficient ventilation of the device.
- Ensure that you keep the minimum distance of 10 cm to the wall.
- Ensure compliance with the operating temperature.



- Do not install the device in places where it is exposed to environmental impacts such as rain or direct sunlight.
- Do not install the device in places where it is exposed to high humidity, dust or smoke. In case of doubt, please contact your sales partner.

- Please use a soft, moist cloth for cleaning.
- For cleaning the screen, please use only commercially available screen cleaner. Do not spray the cleaner directly to the device but onto a cloth.
- Please clean ventilation slots regularly to ensure a good air circulation.



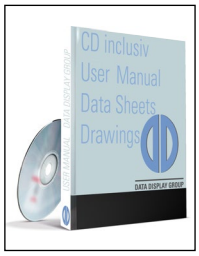
- Protect your device from water splash.
- When cleaning, please make sure that no liquids get into the device.
- Screens and surfaces can be easily scratched. Therefore, please use the prescribed cloth only.

- Caution high voltage! Never open the device by yourself.
- In case of unusual noises, burnt smell or smoke unplug the power cable.
- Do not insert objects into the device through the ventilation slots.
- If the same picture is displayed over a longer period of time, an after-image may arise.
- When exchanging batteries, pay attention to the polarity. Keep batteries away from children and ensure an environmentally correct disposal.

4. Scope of Delivery

When unpacking the monitor, please check if the following accessories are included in the shipment:

Note: Pictures can differ from actually supplied products.



☐ User manual

☐ Compact disc

☐ Power supply!****

☐ RGB cable

☐ USB cable*

☐ Power adapter

☐ Power cable**

☐ USB Sstick***

* Displays with touch sensor only

** Cable may vary depending on country

*** POS-Line VideoPoster series only

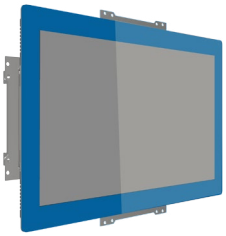
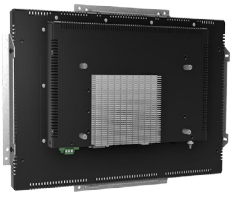
**** Supply at 24V-version without power supply

5. Display Looks and Mounting Options

Various front bezels are available for the POS-Line displays to support the mounting in different situations and applications. The front bezel changes the look of the displays.

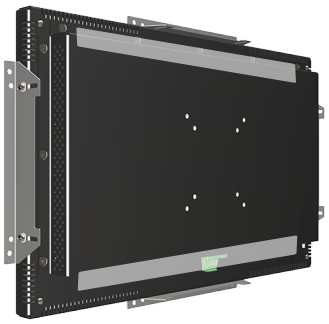
Note: All the photos and graphic representations of this document show open frame displays. However, the explanations apply also to displays with front bezel.

Displays with various front bezels:

Open frame display (without bezel) For mounting with angles or VESA compatible mounts.		
Display with front bezel For VESA compatible mounts.		
Display with front plate For front mount applications with angles or VESA compatible mounts.		
Display with true-flat glass For front mount applications with angles or VESA compatible mounts.		
IQ Ontario display with passive cooling IQ displays with passive cooling have a heat sink on the back side.		
IQ Core-i display with passive cooling IQ displays with passive cooling have a heat sink on the back side.		

6. Position of Connectors and Controls

All the connectors for power and cables are located at the bottom of the back side of the display. The OSD keyboard (POS-Line Video series only) is located at the top of the back side.



Position of the OSD keyboard (Video series only)

Position of the connectors for power and signal cables

7. Connecting to Power

Note: The operating power of the POS-Line monitor depends on the choosen controller and on selected options. Please read the lable regarding the power supply before connecting the monitor to the power.

Note: All the POS-Line monitors requiring 12V DC power are shipped with an appropriate power supply. The POS-Line monitors with 24V DV power requirements are shipped without power supply. Please read the chapter "Connecting to an existing power supply" carefully.

Depending on controller and on ordered options, POS-Line monitors have different power requirements. The following table lists all the POS-Line versions and their operating power:

Monitor Version	Operating Power	Power Supply Included
POS-Line Video PME (for standard video signals VGA, HDMI, DP)	12V DC	yes
POS-Line Video (for standard video signals VGA, DVI, S-Video, CVBS)	12V DC / 24V DC	yes / no
POS-Line IQ Ontario	12V DC	yes
POS-Line Core-i	9V DC - 24V DC	yes
POS-Line VideoPoster	12V DC	yes

Note: The POS-Line displays of the IQ series (with integrated PC) larger or equal to 48cm (19") are shipped with a more powerful power supply.

Display	Input voltage	Output voltage	Output current	Power
Power supply für POS-Line (not for IQ-Core i 15", 17" and 19" as well as IQ-Ontario 19", 21.5" and 23")	100-240 V AC	12V DC	5 A	60 Watts
Power supply for POS-Line series IQ-Core-i: 15", 17", 19" IQ-Ontario: 19", 21.5", 23"	100-240 V AC	12V DC	7 A	84 Watts

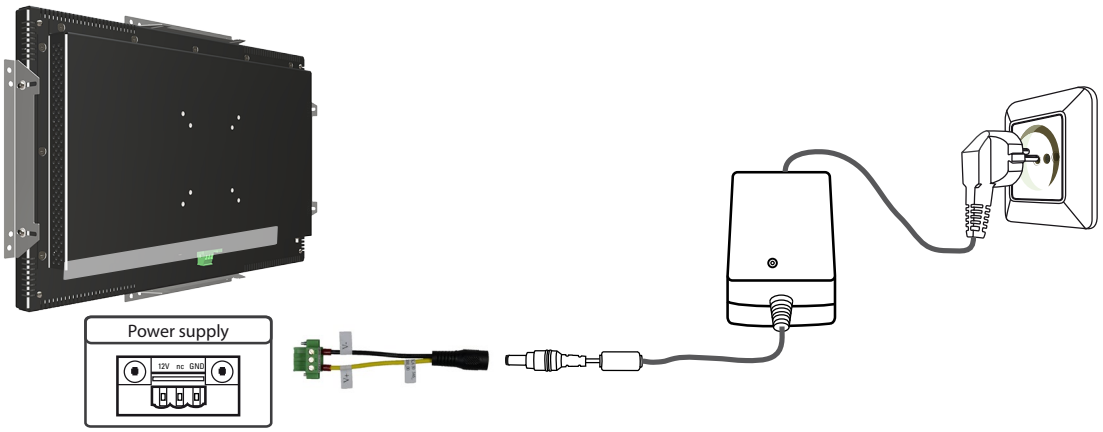
The power is connected to the display via the green female connector at the back side.

Specification of the power connector:
Female connector: Phoenix Contact DFK-MSTB-2,5 / 3-GF
Male plug: Phoenix Contact MSTB 2,5 / 3-STF

Connecting to power with included power supply

Note: Connect the data cables to external devices before plugging the display to the power.

- Connect the adapter cable to the display.
- Connect the adapter cable to the 12 V connector of the power supply.
- Insert the power cable into the power supply.
- Connect the power cable to a power socket.

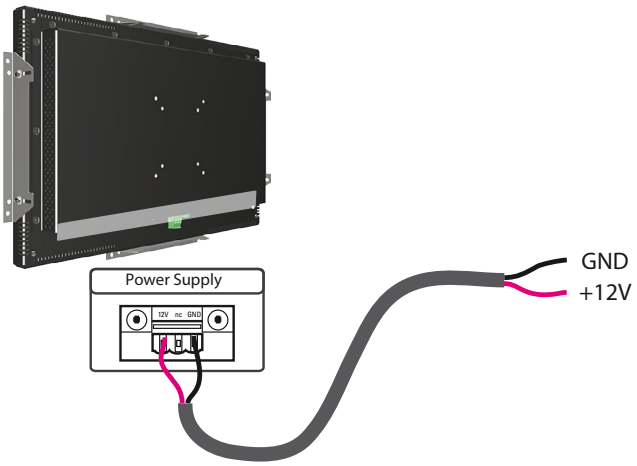


Connecting to an existing power supply

Caution: The POS-Line monitors with 12V DC operating power and POS-Line Core-i monitors with an operating power from 9V DC to 24V DC must only be connected to a low power source according to EN60950-1 chapter 2.5 „Low Power Source“).

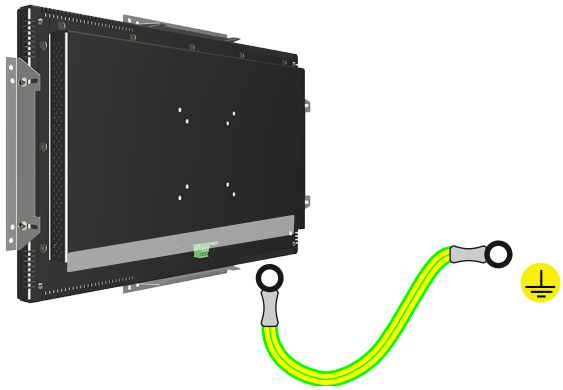
Caution: The power source for POS-Line monitors with 24V DC operating power must not exceed the limit of 250 VA.

- Make sure that your external power supply is sufficient for the display. The maximum power consumption of the display is indicated in the data sheet and the display label.
- Disconnect the green connector from the adapter cable.
- Connect your POS-Line monitor to your power source. Pay attention to polarity!



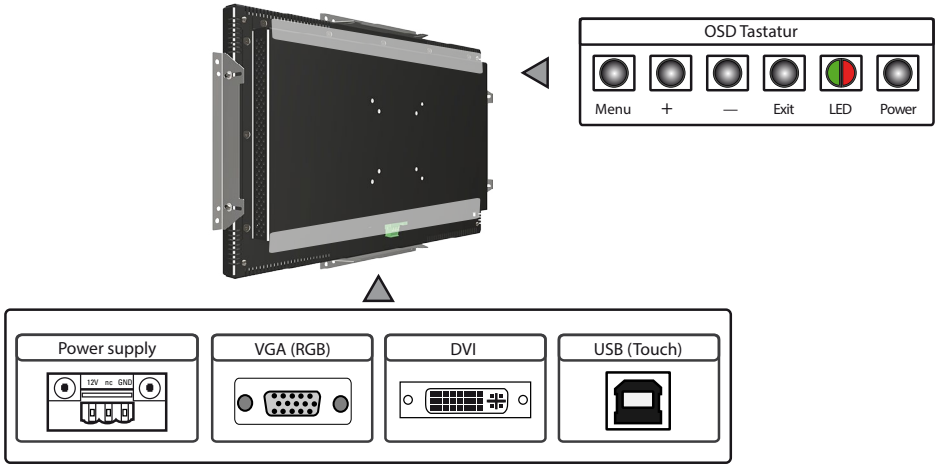
Grounding the display chassis

Optionally the display chassis can be connected to the ground of a machine or other equipment. The earth cable must have a sufficient cross-sectional area, i.e 0.75 mm².

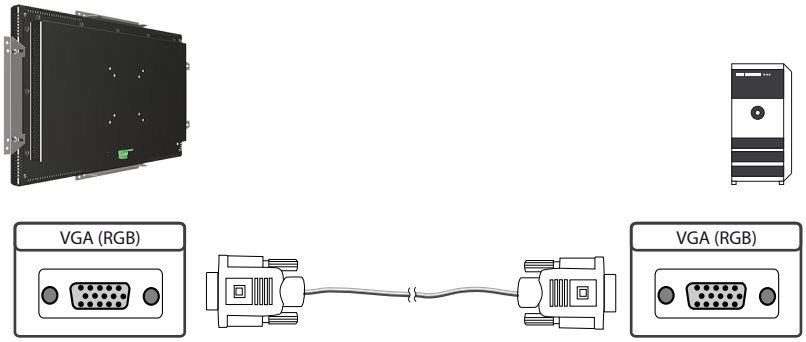


8. POS-Line Video P-ECOIII

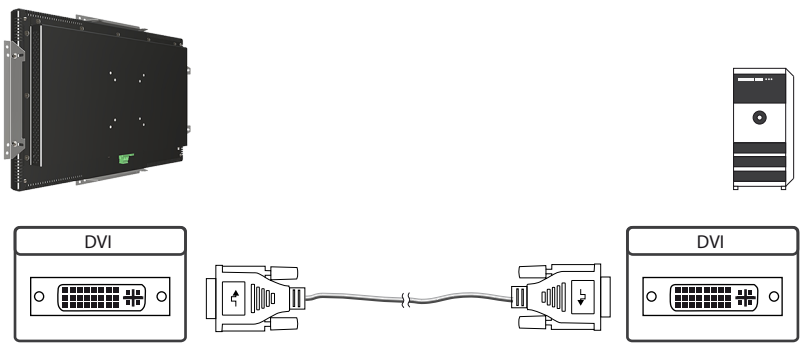
Connectors of POS-Line Video P-ECOIII series



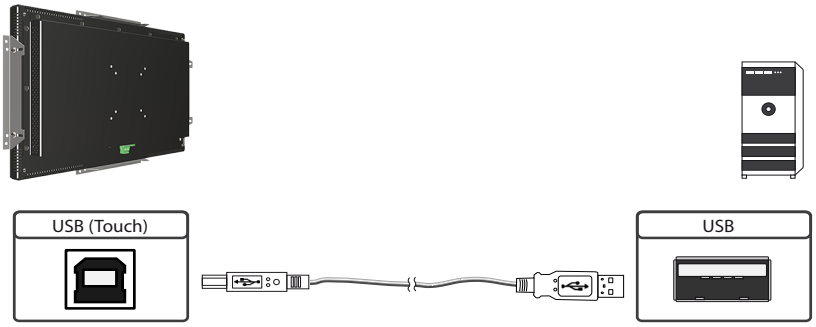
Connecting to a PC with VGA cable



Connecting to a PC with DVI cable

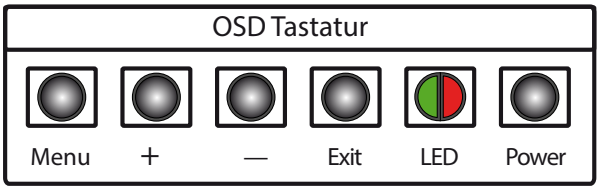


Connecting the touch to a PC with USB cable (displays with touch sensor only)



OSD keyboard

OSD functions of the monitor can be controlled via OSD key pad. The OSD allows selection of input source and fine tuning of various functional parameters like brightness, contrast etc.



The buttons of the OSD control can either be used:

- To access various functions directly
- To navigate within the OSD

The following two tables give an overview about the functions:

Direct functions:

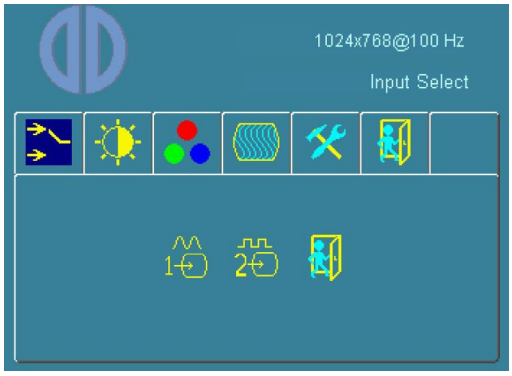
Key	Function	Comment
Menu	Opens the OSD menu	
+	Switching input signal	
—	Adjust brightness	
Exit	Auto adjust (RGB only)	
Power	On/ Off	

Navigation in OSD menu:

Key	Function	Comment
Menu	Select submenu/ function	
+	Next menu item	in main or in sub menu
	Move image right	in sub menu horizontal position
	Move image up	in sub menu vertical position
	Increase slider bar value	when a slider bar is active
—	Previous menu item	in main or in sub menu
	Move image left	in sub menu horizontal position
	Move image down	in sub menu vertical position
	Decrease slider bar value	when a slider bar is active
Exit	Leave function / sub / OSD	
Power	On/ Off	

The LED show the current status of the board:

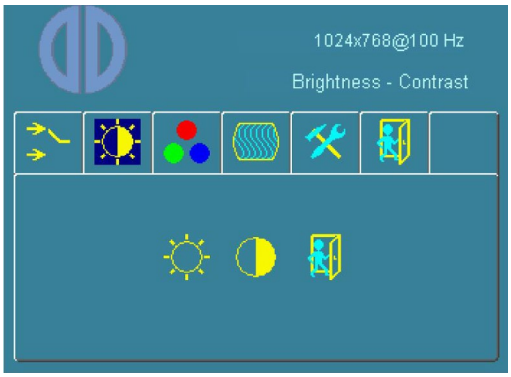
Color	Meaning	Remark
Green	Signal found	
Green blink	Signal search	
Red	Sleep mode	
LED off	Power off	



OSD menu

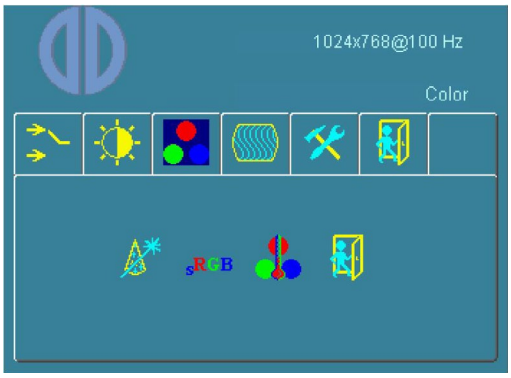
Input Select

1: Select VGA as input signal.
2: Select DVI as input signal.
Exit: Leave sub menu.
Press +/- keys to select sub menu.
Press menu key to go to sub menu.



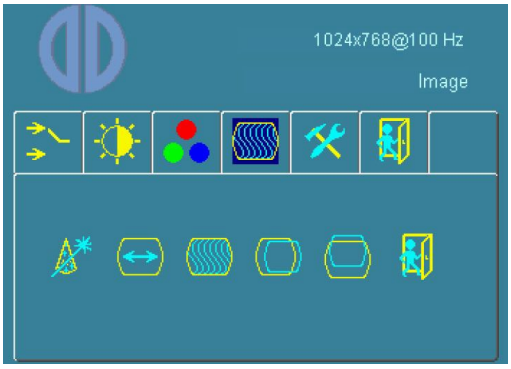
Display - Contrast

1: Adjust panel brightness.
2: Adjust panel contrast.
Exit: Leave sub menu.
Press +/- keys to select sub menu.
Press menu key to go to sub menu.



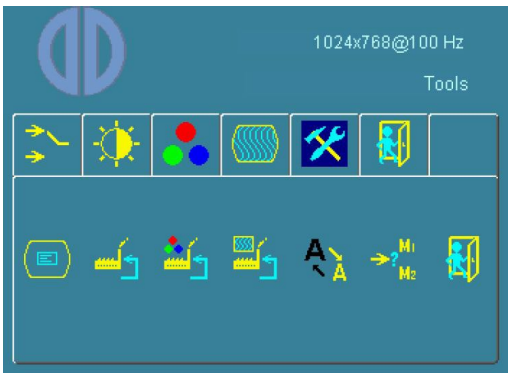
Color

1: Perform automatic color adjustment.
2: Set color space to sRGB.
3: Adjust color temperature manually.
Exit: Leave sub menu.
Press +/- keys to select sub menu.
Press menu key to go to sub menu.



Image

1: Perform automatic image optimization.
2: Adjust image width.
3: Adjust scanning spot of RGB signal.
4: Adjust image position in horizontal direction.
5: Adjust image position in vertical direction.
Exit: Leave sub menu.
Press +/- keys to select sub menu.
Press menu key to go to sub menu.

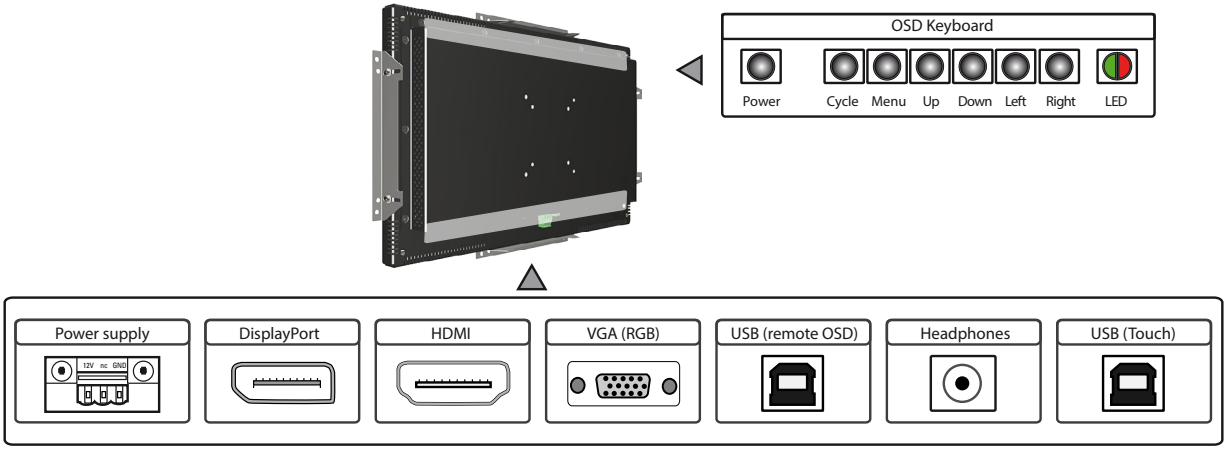


Tools

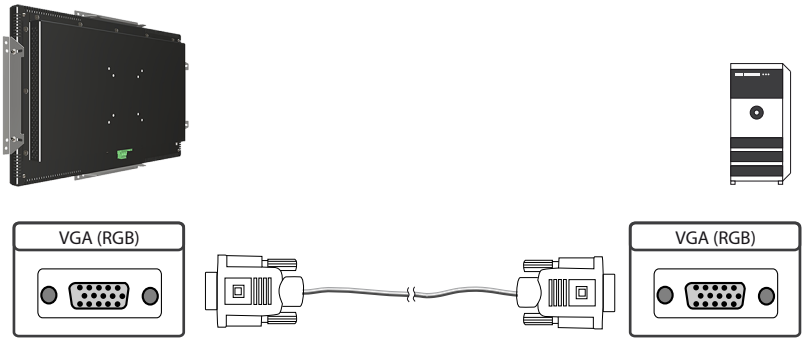
1: OSD adjustments for time out, position and direction (rotate, flip).
2: Reset all settings to factory defaults.
3: Reset all color settings to factory defaults.
4: Reset all position settings to factory defaults.
5: Adjust image sharpness.
6: Set DOS modes 640 / 720.
Exit: Leave sub menu.
Press +/- keys to select sub menu.
Press menu key to go to sub menu.

9. POS-Line Video PME

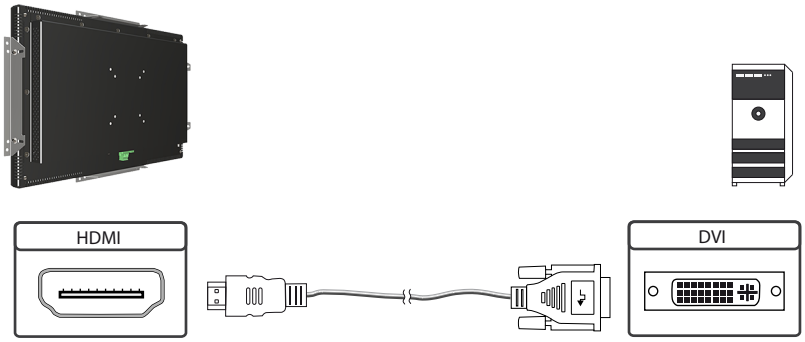
Connectors and OSD buttons of POS-Line Video PME series



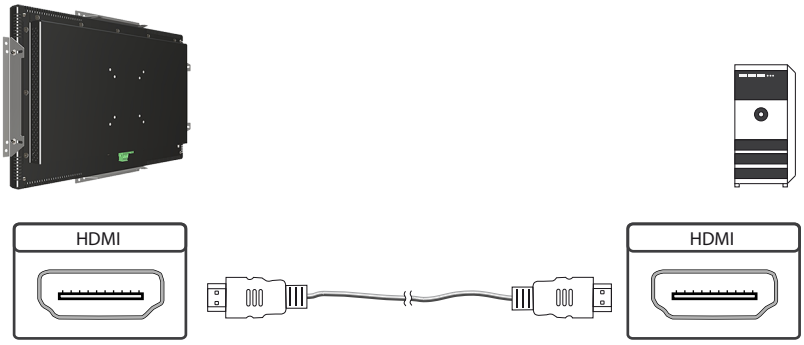
Connecting to a PC with VGA cable



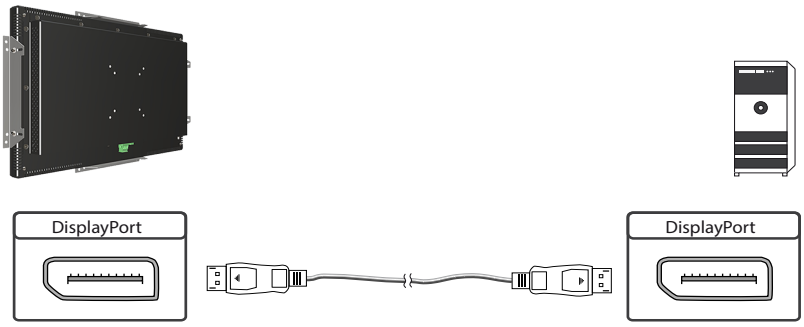
Connecting to a PC with HDMI-DVI cable



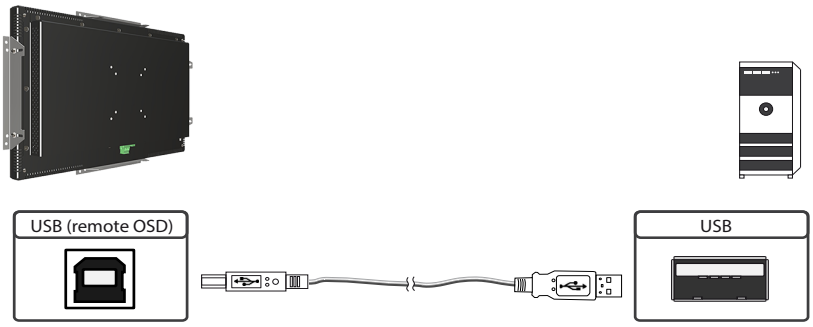
Connecting to a PC with HDMI cable



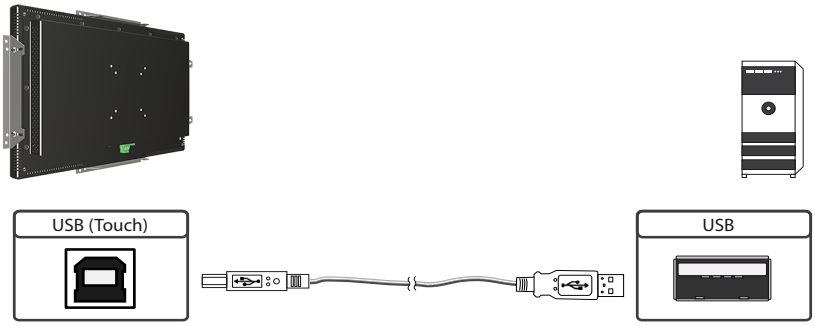
Connecting to a PC with DisplayPort cable



Connecting the Remote-OSD to a PC with USB cable



Connecting the touch to a PC with USB cable (for displays with touch sensor only)

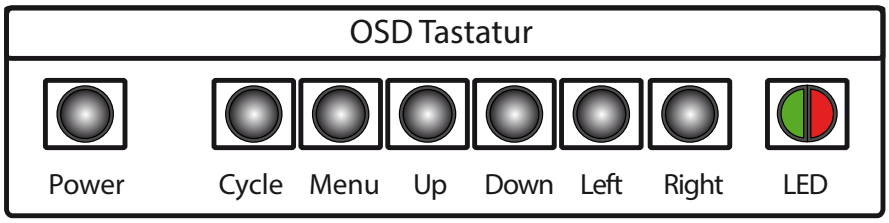


Remote OSD control

To control the OSD menu of the display remotely from a PC, use a USB cable and connect the display to your PC as described above. Please read the handbook for the remote control carefully. The handbook can be found in folder 'Remote-OSD' of the attached CD. The document describes in detail all the commands and the structure of the telegrams for the serial interface.

OSD keyboard

The OSD functions of the monitor can be controlled via OSD key pad. The OSD allows the selection of the input source and the fine tuning of various functional parameters like brightness, contrast etc.



The six buttons of the OSD control can either be used:

- To access various functions directly
- To navigate within the OSD

The following two tables give an overview of the functions:

Direct functions:

Key	Function	Comment
Power	On / Off	
Cycle	Switching input signal	
Menu	Opens the OSD menu	
UP	Volume +	
Down	Volume -	
Left	Brightness -	
Right	Brightness +	

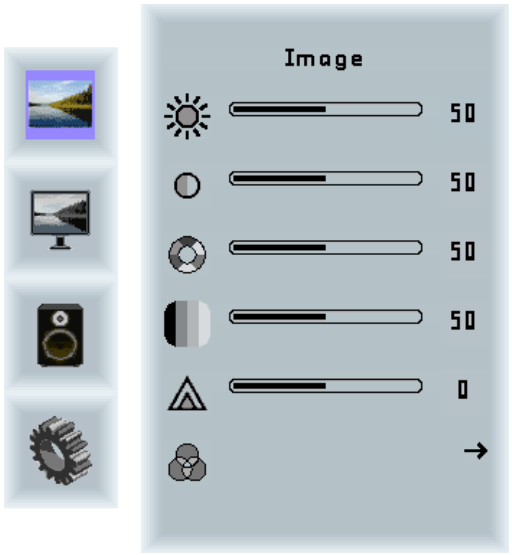
Navigation in OSD menu:

Key	Function	Comment
Cycle	Open sub menu/ execute function	
Menu	Enter OSD menu	when OSD is closed
	One step back	when OSD is open
UP	Cursor up	in main or in sub menu
	Image up/ OSD down	in menu image-/ OSD position

Down	Cursor down	in main or in sub menu
	Image down/ OSD up	in menu image/ OSD position
Left	Decrease slider bar value	when a slider bar is active
	Image to the right/ OSD to the left	in menu image/ OSD position
Right	Increase slider bar value	when a slider bar is active
	Image to the left/ OSD to the right	in menu image/ OSD position

The green/red LEDs (single package) on the external keypad show the current status of the board:

Color	Meaning	Remark
Green	Normal operation	
Green blink	Search input signal	
Red	Sleep mode	



OSD menu

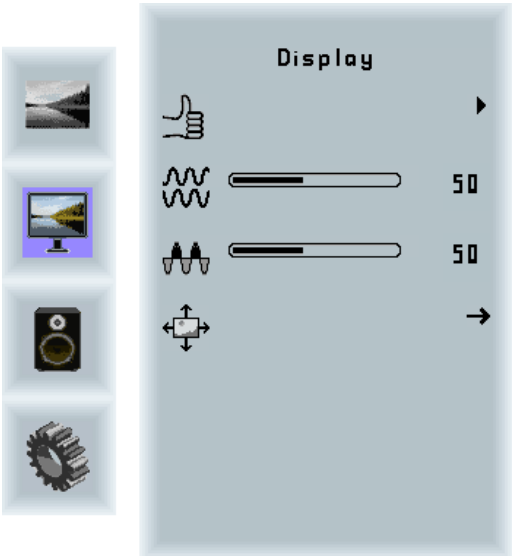
Image Menu

Brightness:	Panel brightness adjustment.
Contrast:	Panel contrast adjustment.
Hue:	Panel hue adjustment.
Saturation:	Panel saturation adjustment.

Sharpness:	Panel sharpness adjustment.
Color:	Opens the color sub menu.

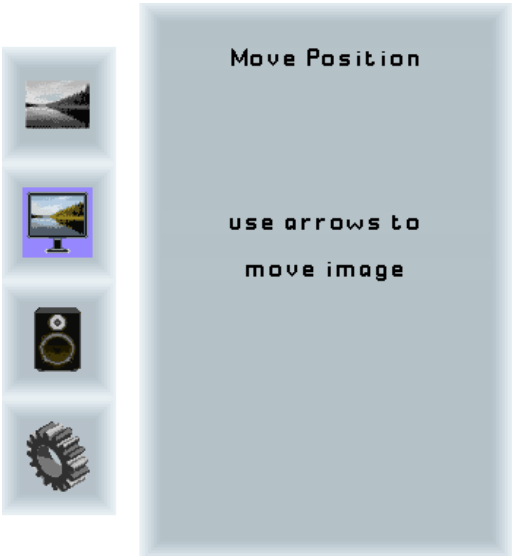
Color Sub Menu

Auto:	Performs auto color adjustment.
Color Temp:	Allow selection of different color temperature schemes, predefined and custom. Available if color space of input is RGB.
Full color:	Selects full received color space.
SRGB:	Selects SRGB color space.
XVYCC:	Selects XVYCC color space.



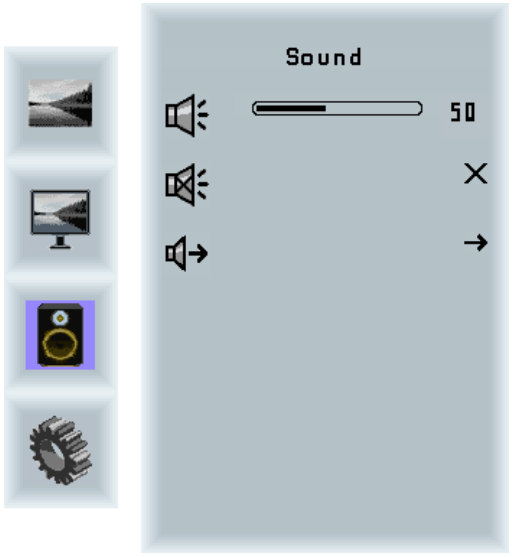
Display Menu

Auto-adjust:	Performs auto-adjustment on the VGA input image.
Phase:	This function is a slider to adjust the sampling phase of the analogue interface. For optimum image quality, input pixels should be sampled at the ideal sampling points.
Clock:	This function is a slider to adjust the sample clock of the analogue interface. This is helpful for improving the image quality for non-standard display modes.
Position:	Used to modify the placement of the image.



Move Position Sub Menu

Arrows	Use arrow keys to move the position of the image on the screen.



Sound Menu

Volume:	Slider bar to adjust volume.
Mute:	Mutes audio.
Output:	Chooses between speakers and headphone. Only one can be active at a time (Speakers are not available for POS-Line monitors).

Output Sub Menu

Speakers:	Toggles speakers on / off.
Headphone	Toggles headphone on / off.

System Menu

Input source	Sub menu to select input source.
OSD settings	Sub menu for OSD settings.
Factory reset	Sub menu for Factory Reset.
EDIT settings	Sub menu for EDIT settings.
FW Revision	Firmware revision.
OSD Revision	OSD revision.

Input Sub Menu

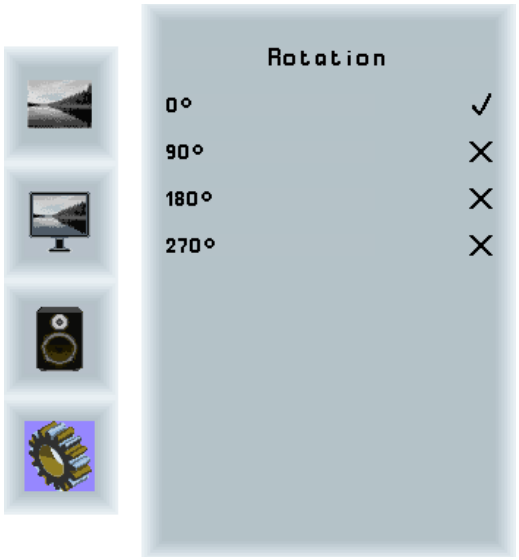
Display Port	Select display port as input signal.
VGA	Select VGA as input signal.
DVI/HDMI	Select DVI / HDMI as input signal.
Auto Scan	Enable/disable input auto-scan.

OSD Settings Sub Menu

Timer	Sub menu for timer settings.
Rotation	Sub menu for rotation settings.
Position	Sub menu for image position.
Transparency	Slider to set transparency.

Timer Sub Menu

Timer:	Selects how many seconds the OSD will remain active after the last use.



Rotation Sub Menu

Rotation	Rotates the OSD menu.

Reset Sub Menu

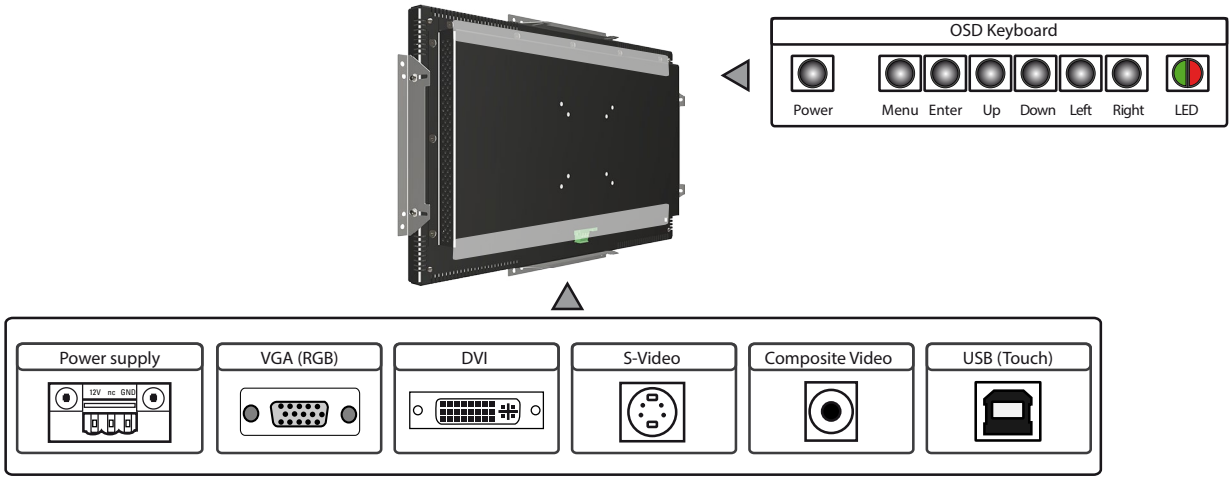
Reset	Performs factory reset.

EDID Write Protect Sub Menu

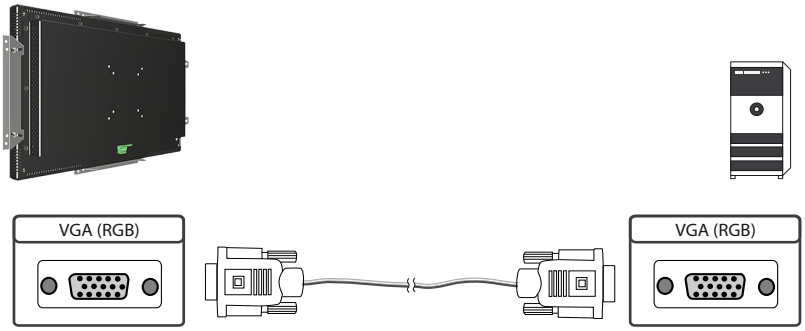
Write protect	EDID write protect on / off.

10. POS-Line Video PIII

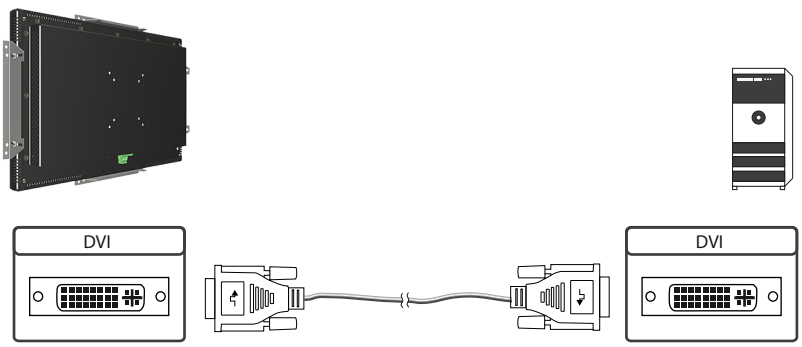
Connectors and OSD buttons of POS-Line Video PIII series



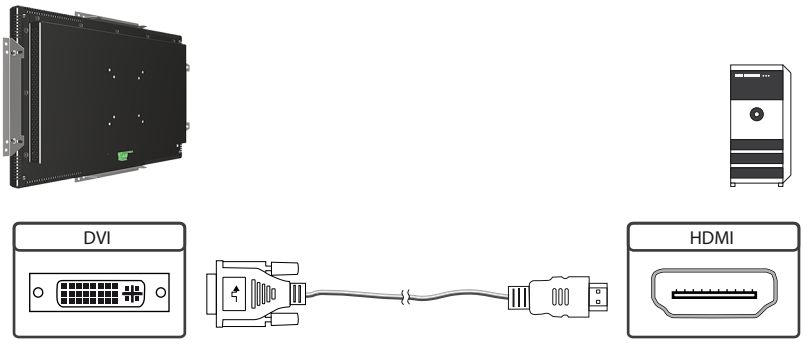
Connecting to a PC with VGA cable



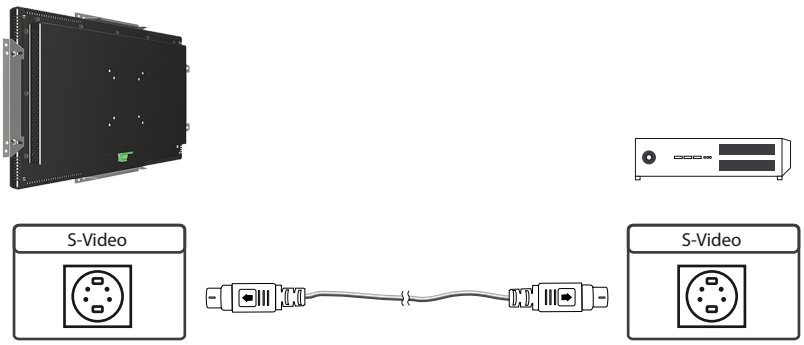
Connecting to a PC with DVI cable



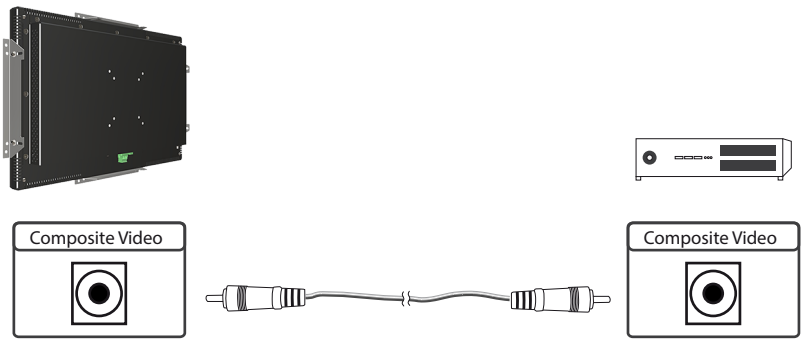
Connecting to a PC with DVI-HDMI cable



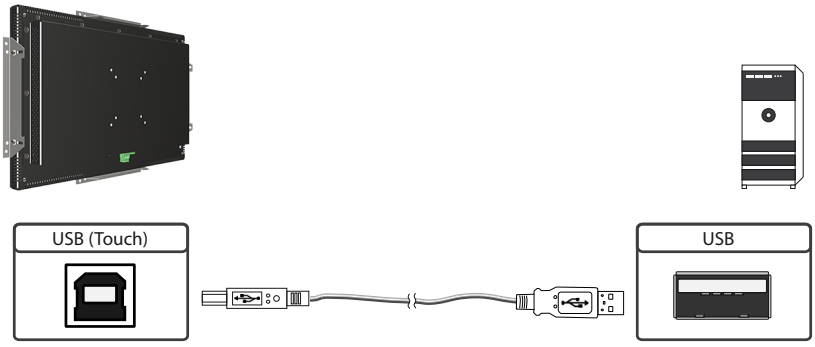
Connecting to an external device with S-Video cable



Connecting to an external device with Composite Video cable

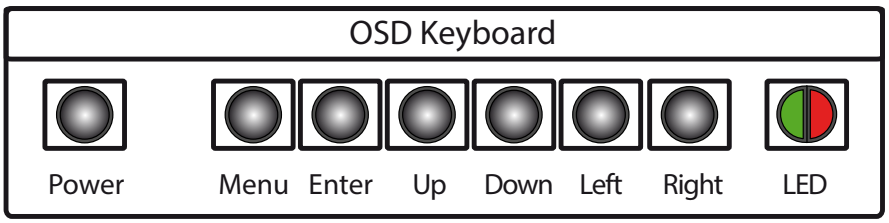


Connecting the Touch to a PC with USB cable (for displays with touch sensor only)



OSD keyboard

The OSD functions of the monitor can be controlled via OSD key pad. The OSD allows the selection of the input source and the fine tuning of various functional parameters like brightness, contrast etc.



The six buttons of the OSD control can either be used:

- To access various functions directly
- To navigate within the OSD

The following two tables provide an overview of the functions:

Direct functions:

Key	Function	Remark
Power	ON/ Off	
Menu	To the OSD menu	
UP	Select main input signal	
Down	PIP / PAP select	if PIP/ PAP is active
Left	Brightness -	
Right	Brightness +	

Navigation in OSD menu:

Key	Function	Remark
Menu	Close OSD menu	when in main menu
	Leave sub menu	when in sub menu
	Leave function	when function is selected
Enter	Opens main or sub menu	when in main or sub menu
	Executes selected function	when function is selected
UP	Move cursor up	when in main or sub menu
Down	Move cursor down	when in main or sub menu
	Select input source	when in main or in PIP menu
	Opens sub menu	when in main or sub menu

Left	Move cursor left	when in sub menu
	Decrease value of slider	when slider is selected
Right	Move cursor right	when in sub menu
	Increase value of slider	when slider is selected

The green/red LEDs on the external keypad show the current status of the board:

Color	Meaning	Remark
Green	Normal operation	
Red	No input signal	
Light off	Monitor switched off	

Special functions of the controller:

- PIP (Picture in Picture): Simultaneous display of two video sources on the screen with adjustable positions.
- PAP (Picture and Picture): Side-by-side display of two video sources.
- Tiling: Display of a video source on several monitors with mutually non overlapping frames.

OSD menu

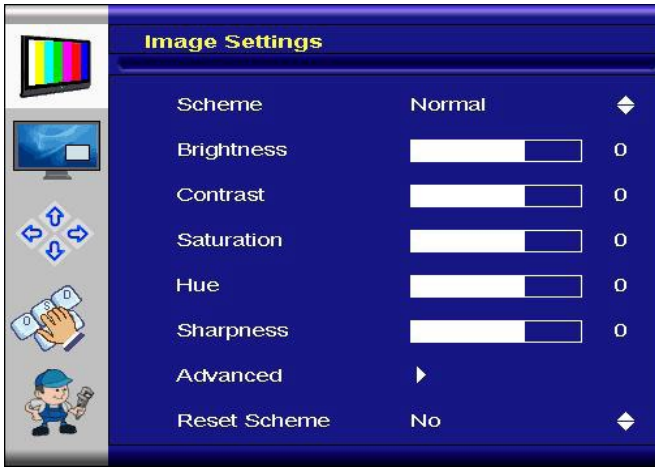
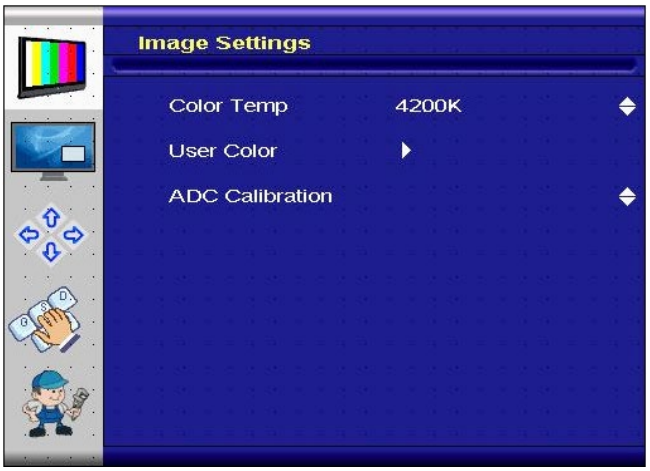


Image Settings Menu

Scheme:	Switches between normal/sport/ game/cinema/vivid presettings.
Brightness:	Panel brightness adjustment.
Contrast:	Panel contrast adjustment.
Hue:	Panel HUE adjustment (RGB, S-Video and Composite) only.
Saturation:	Panel saturation adjustment (RGB, S-Video and Composite) only.
Sharpness:	Panel sharpness adjustment.
Advanced:	Open Advanced sub menu.

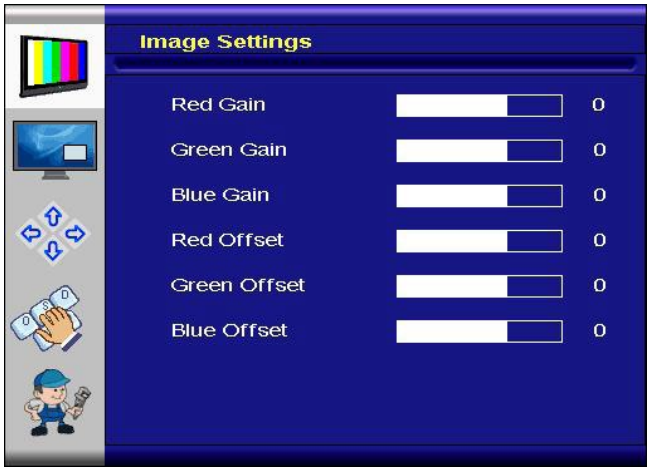
Advanced Image Settings Menu

Note:	Noise Reduction, Video Processing and Film Mode & Scaling are only available for RGB, S-Video and Composite signals.



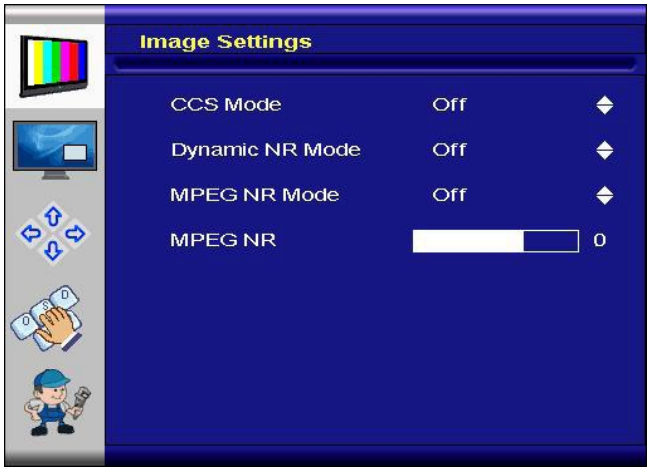
Advanced Color Sub Menu

Color Temp:	Allow selection of different color temperature schemes. Selections are user, sRGB, 4200K, 5000K, 5400K, 6500K, 7200K, 9300K.
User Color:	Create custom color scheme.
ADC:	Auto Color-Adjust. Performs auto fine tuning on the ADC (RGB, S-Video and Composite only).



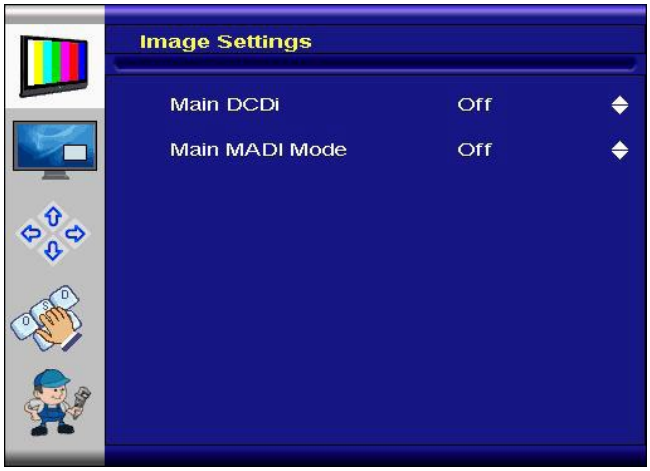
Advanced User Color Sub Menu

Red Gain:	Boost adjustment on red.
Green Gain:	Boost adjustment on green.
Blue Gain:	Boost adjustment on blue.
Red Offset:	Offset level on red.
Green Offset:	Offset level on green.
Blue Offset:	Offset level on blue.



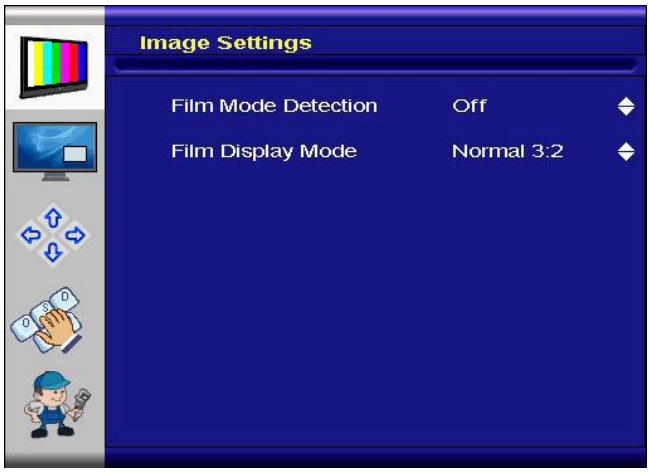
Advanced Noise Reduction Sub Menu

CCS Mode:	Changes Cross-Color Suppression between off/adaptive/normal.
Dynamic NR:	Changes Dynamic Noise Reduction between low/medium/high/off/ adaptive. High setting may cause loss of detail, adjust for best image.
MPEG NR:	Enables/disables the MPEG NR Mode.
MPEG NR:	Manual setting of MPEG noise reduction level.



Advanced Video Processing Sub Menu

Main DCDi:	Turns DCDi on/off on main channel.
MADI Mode:	Changes Motion Adaptive De-Interlacing among normal/off/adaptive modes.

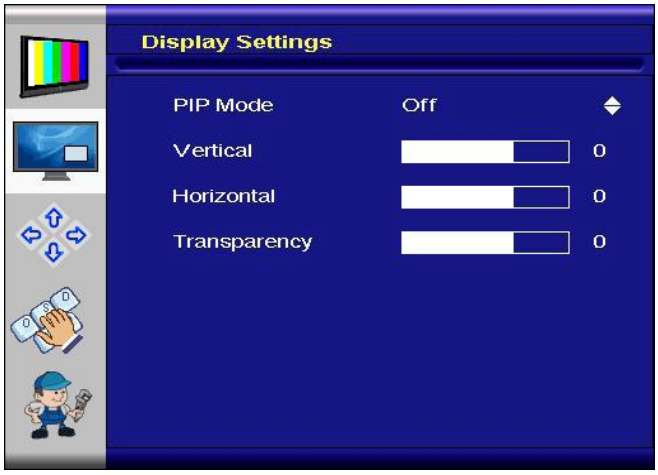


Advanced Film Mode Sub Menu

Detection:	Selection of Video-3:2/Video-2:2/ Video-3:2-2:2/off.
Mode:	Selection of Normal 3:2 or other future modes.

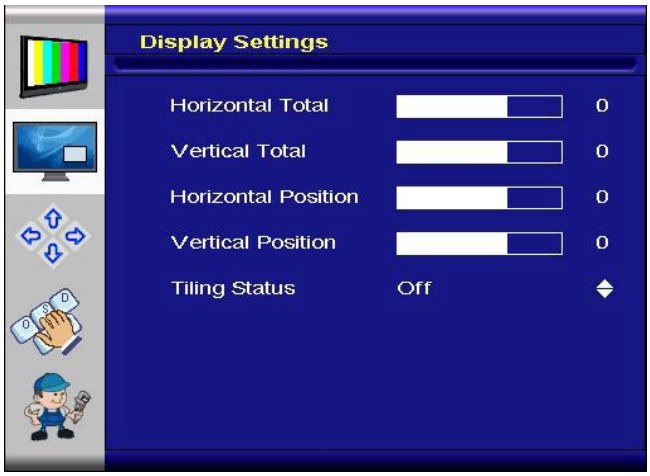
Display Settings Menü

Aspect Ratio:	Used to adjust display among full screen, panoramic, letter box expand, pillar box, and 1:1.
PIP:	PIP sub menu.
Tiling:	Tiling sub menu.



PIP (Picture in Picture) Sub Menu

PIP mode:	Toggle between Off, PAP-Tall, Side-by-Side, Small PIP and Large PIP.
Vertical:	Vertical position of PIP image.
Horizontal	Horizontal position of PIP image.
Transparency:	Transparency of PIP image.



Tiling Sub Menu (for video walls)

Horizontal Total:	Defines the total horizontal number of displays.
Vertical Total:	Defines the total vertical number of displays.
Horizontal Position:	Defines the horizontal position of the actual display unit.
Vertical Position:	Defines the vertical position of the actual display unit.
Tiling Status:	Enables/disables the tiling function. If the PIP-Mode is PAP-Tall or side-by-side, the tiling status will be off and disabled.

Example: 3 by 3 video wall: Definition of Horizontal/Vertical display position:

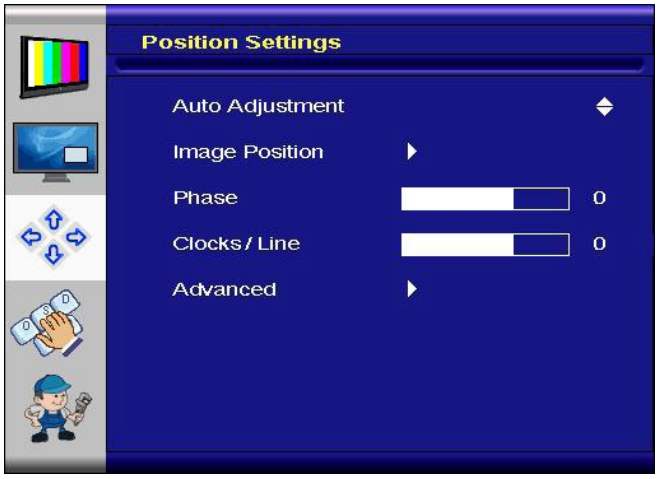
Position	1	2	1
1	1 / 1	2 / 1	3 / 1
2	1 / 2	2 / 2	3 / 2
3	1 / 3	2 / 3	3 / 3

Note:

- Tiling property cannot be used while PAP-Tall or Side-by-Side modes are active.
- If PIP is turned on, the PIP image would be displayed on every panel of the video wall.
- Image and position menus are disabled while tiling is on.
- For best results, the Horizontal Total and Vertical Total value should to be set to a value which is an integer divider of the input width or height, respectively. For example, if input is 1280x768, horizontal total has to be set to one of 2, 4, 5, 8 and vertical total has to be set to one of 2, 3, 4, 6, 8.

Position Settings Menu (for HDMI, S-Video and Component Video Signals)

Width:	Adjusts total width of the image by stretching or shrinking.
Height:	Adjusts total height of the image by stretching or shrinking.
Horizontal Start:	Changes the starting point of the image horizontally, without altering height.
Vertical Start:	Changes the starting point of the image vertically, without altering width.



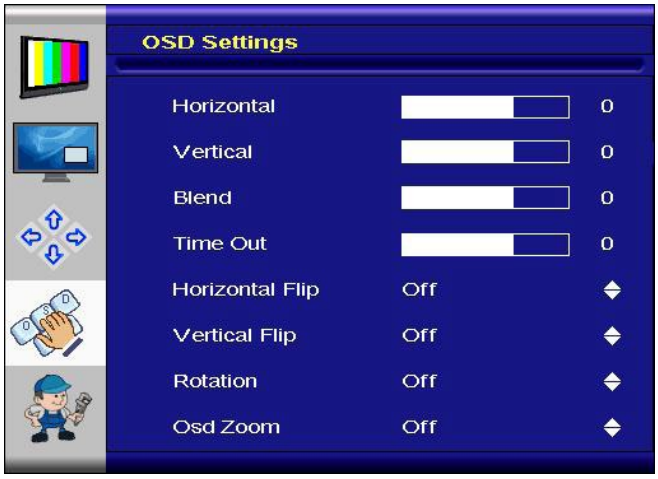
Position Settings Menu (for RGB)

Auto Adjust:	Performs auto-adjust function on the image.
Image Position.:	Image position sub menu.
Phase:	Slider to adjust the sampling phase of the analogue interface. For optimum image quality, input pixels should be sampled at the ideal sampling points.
Clocks/Line:	Slider to adjust the sample clock of the analogue interface. This is helpful for improving the image quality for non-standard display modes.
Advanced:	Advanced Settings sub menu.

Advanced Settings Sub Menu

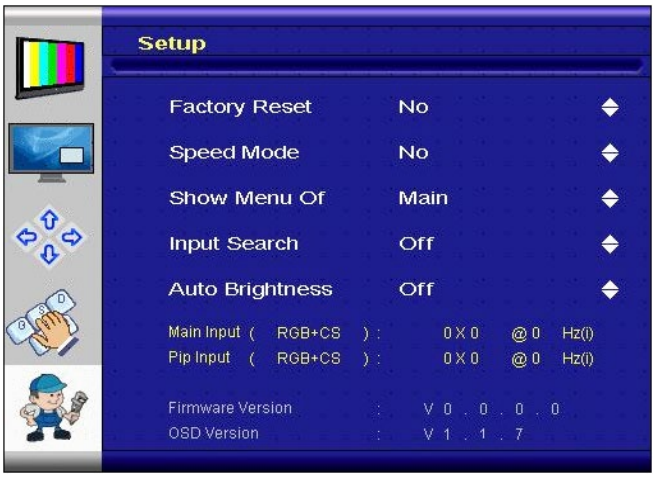
Note:	This function can be used to manually force some of the widely used difficult-to-detect modes which can be misinterpreted by the controller.

Advanced Settings Sub Menu (HDMI mode only)



OSD Settings Menu

Horizontal:	Move the OSD in horizontal direction.
Vertical:	Move the OSD in vertical direction.
Blend:	OSD transparency adjustment.
Time Out:	This function determines after how many seconds the OSD will close itself.
Horizontal Flip:	Flips the OSD horizontally.
Vertical Flip:	Flips the OSD vertically.
Rotation:	Rotates OSD.
OSD Zoom:	Changes OSD size.


Setup
Factory Reset
No
Speed Mode
No
Show Menu Of
Main
Input Search
Off
Auto Brightness
Off
Main Input (RGB+CS) : 0 X 0 @ 0 Hz(i)
Pip Input (RGB+CS) : 0 X 0 @ 0 Hz(i)
Firmware Version : V 0 . 0 . 0 . 0
OSD Version : V 1 . 1 . 7

Setup Menu

Factory Reset:	Execute factory reset.
Speed Mode:	In graphics mode, fast image transfer is supported.
Show Menu Of:	Changes the menu between main image and PIP if the PIP mode is on.
Input Search:	Toggles input search on/off.
Auto Brightness:	(Optional) Toggles automatic brightness control through external light sensor on/off.
Firmware Version:	Installed Firmware Version.
OSD Version:	Installed OSD Version.

11. POS-Line IQ Ontario

Note: The delivery packet includes a driver CD with all the Ontario main board drivers!

Note: This POS-Line display is equipped with a battery. Please read the following instructions carefully:

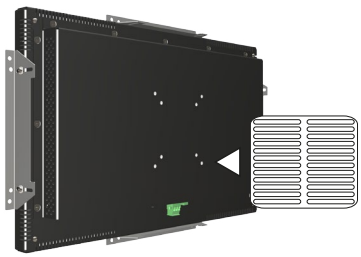
- Unplug the power cable before exchanging the battery.
- There is a risk of explosion if the battery is not installed correctly.
- Replace the battery always with a battery of the same type.
- Recycle empty batteries with the free battery collection system. Please read the chapter "Correct disposal of batteries" of this document.

Active or passive cooling

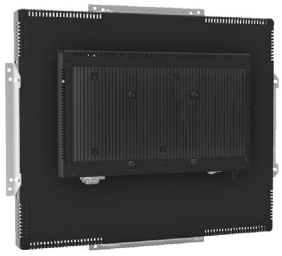
The POS-Line displays of the IQ series (integrated PC) are available with active cooling (fan) or with passive cooling (fan-less).

Displays with active cooling are equipped with a fan/heat sink combination to cool the CPU and to blow the hot air through air-vents located on the back side of the display. Please leave at least 40 mm of space between the back side of the display and a wall to allow air circulation.

Displays with passive cooling are equipped with a heat pipe and a heat sink. The heat pipe transports heat from the CPU to a heat sink located on the back side of the display. Displays with passive cooling do not have moving parts like fans. Please leave at least 40 mm of space between the heat sink and a wall to allow air circulation.



POS-Line IQ with active cooling and air vents

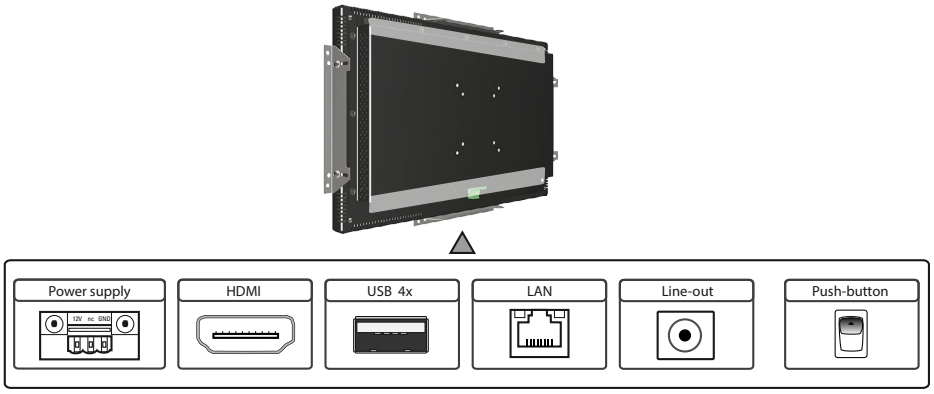


POS-Line IQ with passive cooling and heat sink

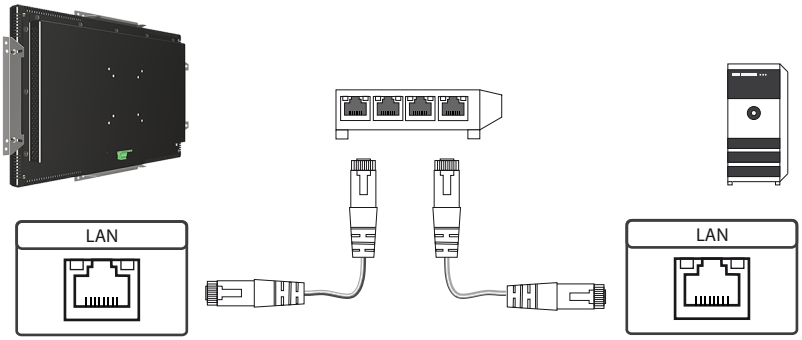
PC specifications

- CPU: AMD Ontario G-Series, T56N, 2 x 1.6 GHz
- Chip set: Hutson A50M
- Grafik: On-board, AMD Radeon HD6320
- RAM 4 GB DDR3
- Festplatte: SSD, SATA 600, 60GB
- USB: 4 x 2.0
- Ethernet: 10 / 100 / 1000 MB/s
- Audio: Line out, Realtec ACC 662 HD
- Video: HDMI (1920 x 1080)

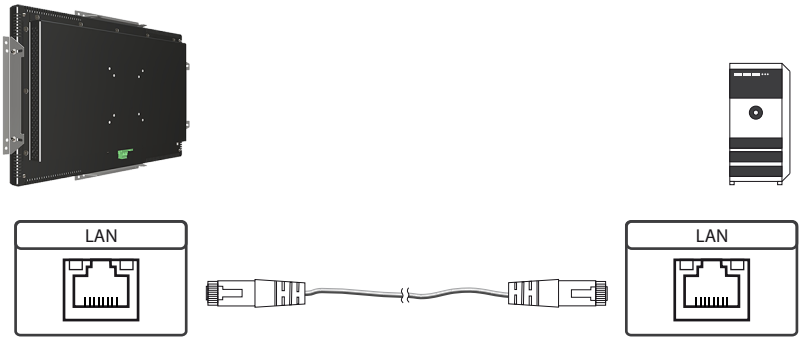
Connectors of POS-Line IQ series



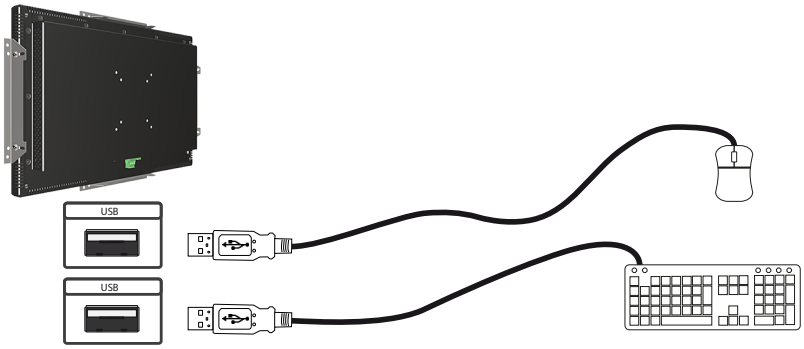
Connecting to a network using a patch cable



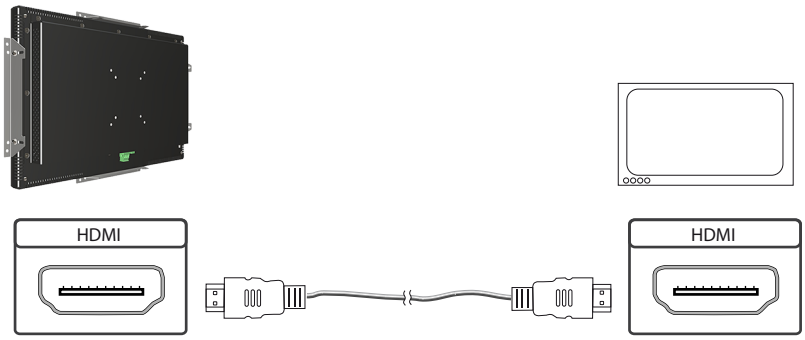
Connecting to a PC using a cross-over cable



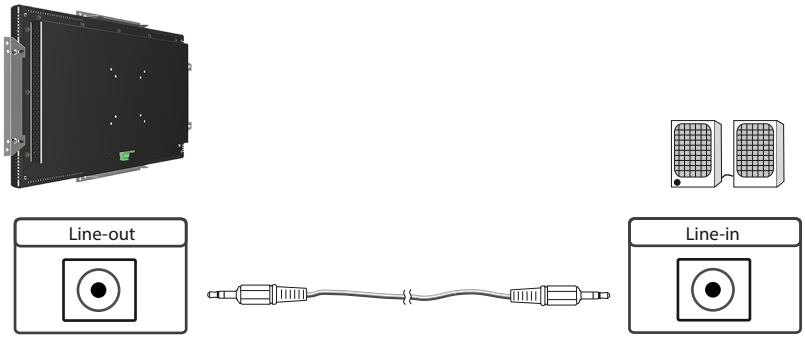
Connecting keyboard and mouse with USB cable



Connecting an external monitor with HDMI cable

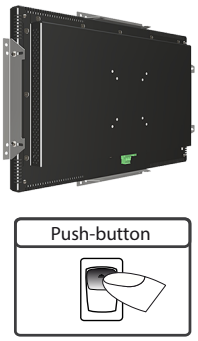


Connecting active speakers with audio cable



Power on/off

The display boots automatically after connecting to the power. Use the push button to switch the display on and off. If switched on, push the push button once to shut down the system. The panel is switched off. If switched off, push the push button once to turn on the display.



BIOS settings

A BIOS from American Megatrends Inc. (AMI BIOS) is installed on the PC main board. To change BIOS settings press the 'DEL' or 'F2' key on your keyboard during the boot process of the PC.

Operating systems

An operating system is pre-installed if your POS-Line display has been ordered with this option. In this case all main board drivers or touch drivers are installed.

Activating the operating system:

- Windows Embedded: This OS is already activated. The license key sticker can be found on the back side of the display.
- Windows 7 and 8: This OS is not activated. The license key sticker is added to the product documentation. After switching on the display for the first time Windows will prompt for the key.

12. POS-Line IQ Core-i

Note: The packet includes a driver CD with all Core-i main board drivers!

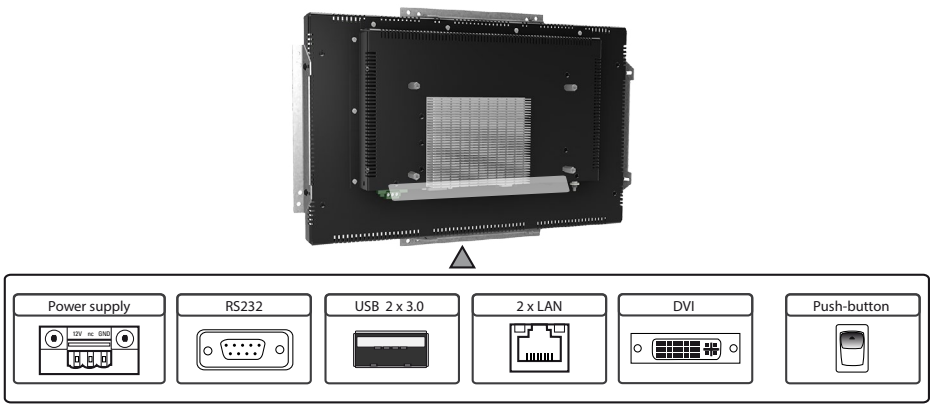
Note: This POS-Line display is equipped with a battery. Please read the following note carefully:

- Unplug the power cable before exchanging the battery.
- There is a risk of explosion if the battery is not installed correctly.
- Replace the battery always with a battery of the same type.
- Recycle empty batteries with the free battery collection system. Please read the chapter “Correct disposal of batteries” in this document.

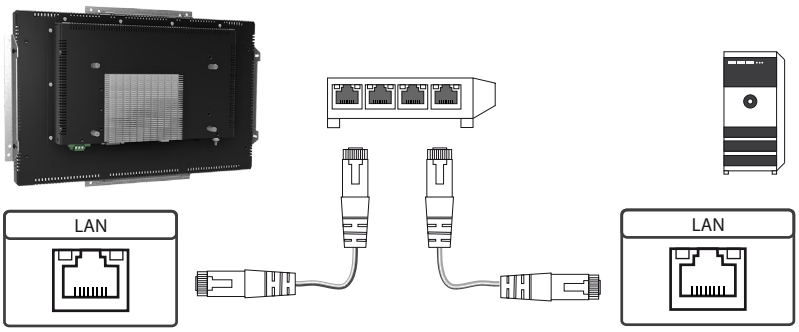
PC specifications

- CPU: Intel Core i5-4300U (2 x 1.9 GHz) or i7-4650U (2x 1.7 GHz)
- Chip set: Integrated 4th Generation Intel Core-i U-Series processor
- Graphic: 4th Generation Intel Core-i U-Series
- RAM 4 GB DDR3
- Mass Storage: M-SATA 60GB
- Multi I/O: 2 x USB 3.0; 1 x RS232/422/485; HD audio; 1 x DVI-i display interface
- Ethernet: 2 x 10 / 100 / 1000 MB/s
- Passive cooling system

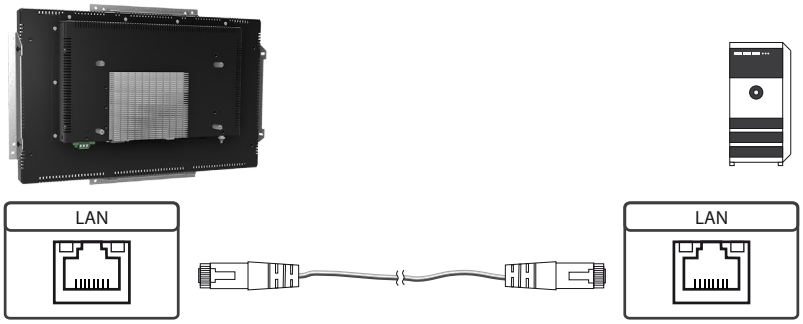
Connectors of POS-Line IQ series



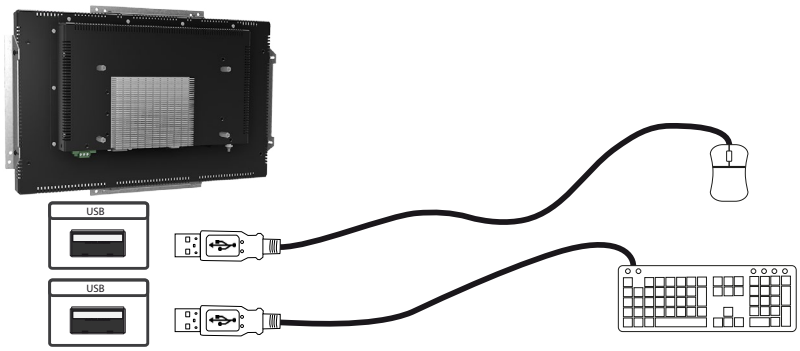
Connecting to a network using a patch cable



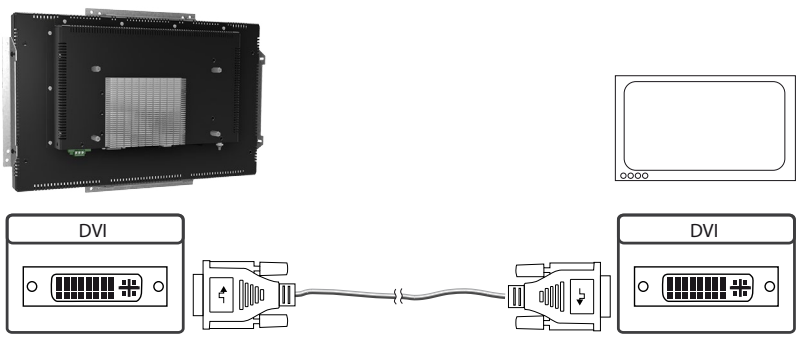
Connecting to a PC using a cross-over cable



Connecting keyboard and mouse with USB cable

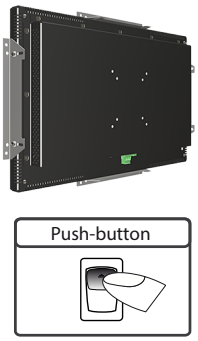


Connecting an external monitor with HDMI cable



Power on/off

The display boots automatically after connecting to the power. Use the push button to switch the display on and off. If switched on, push the push button once to shut down the system. The panel is switched off. If switched off, push the push button once to turn on the display.



BIOS settings

A BIOS from American Megatrends Inc. (AMI BIOS) is installed on the PC main board. To change BIOS settings press the 'DEL' or 'ESC' key on your keyboard during the boot process of the PC.

Operating systems

An operating system is pre-installed if your POS-Line display has been ordered with this option. In this case all main board drivers or touch drivers are installed.

Activating the operating system:

- Windows Embedded: This OS is already activated. The license key sticker can be found on the back side of the display.
- Windows 7 and 8: This OS is not activated. The license key sticker is added to the product documentation. After switching on the display for the first time Windows will prompt for the key.

13. POS-Line VideoPoster

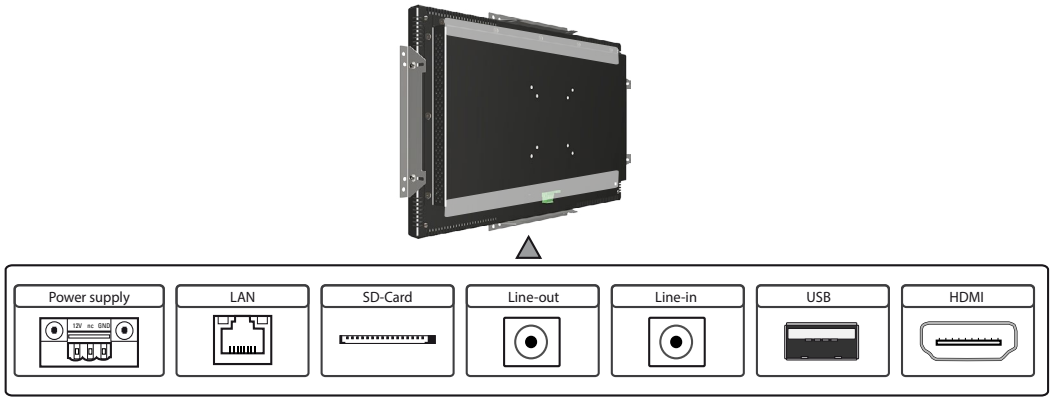
Note: Further information on media player, play list structure, handling, utilization and supporting software modules are available at

Http://www.datadisplay-group.com/tft-controller/industrial-mediaplayers/

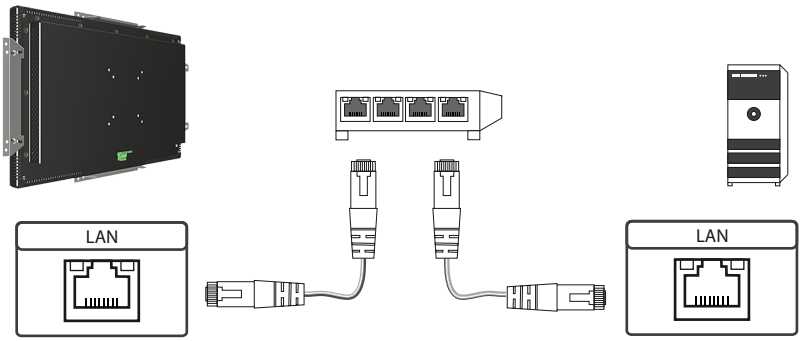
Note: This POS-Line display is equipped with a battery. Please read the following information carefully:

- Unplug the power cable before exchanging the battery.
- There is a risk of explosion if the battery is not installed correctly.
- Replace the battery always with a battery of the same type.
- Recycle empty batteries with the free battery collection system. Please read the chapter "Correct disposal of batteries" in this document.

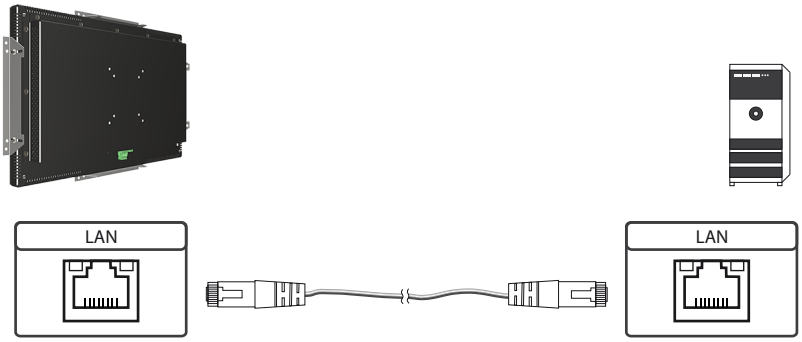
Connectors of POS-Line VideoPoster series



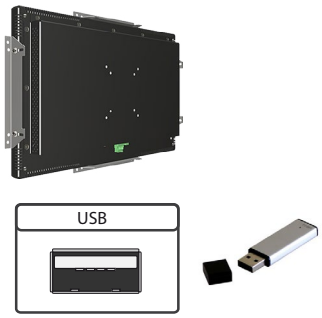
Connecting to a network using a patch cable



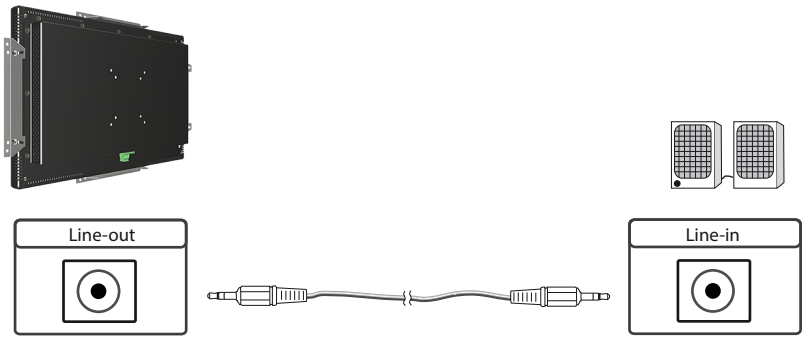
Connecting to a PC using a cross-over cable



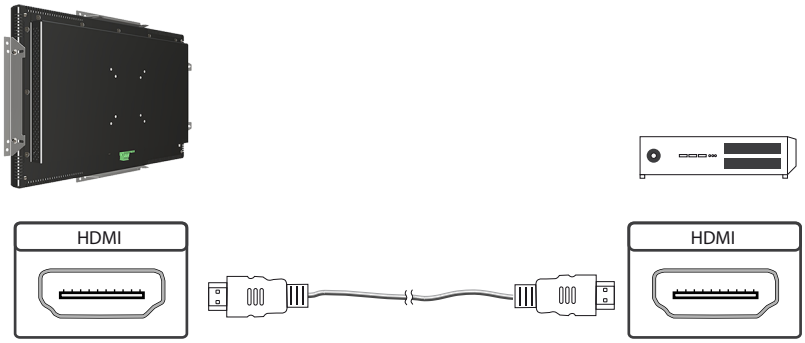
Connecting an USB stick



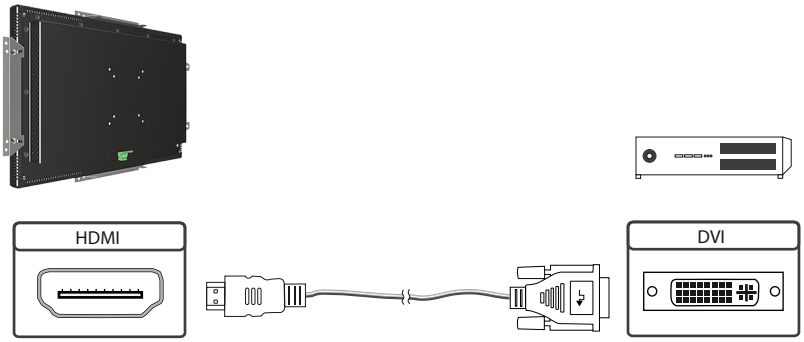
Connecting active speakers



Connecting a signal source using a HDMI cable



Connecting a signal source using a HDMI-DVI cable



Factory configuration at the time of delivery

POS-Line VideoPoster is a network (Ethernet) device. Please note that inaccurate network configuration can have unintended influence on network operations and cause a breakdown of the entire network. To setup the device properly, you must be familiar with the basic operating parameters of your network.

Factory configuration of POS-Line VideoPoster at time of delivery:

- DHCP: off
- PI-Address: 192.168.0.1
- Netmask: 255.255.255.0
- Hostname: Videoposter-III-xx-xx-xx (last 6 bytes of the devices MAC address)
- Login Name: Artista
- Password: Artista
- FTP content update: off

SD Card

Content (play list) is stored locally on a SD card. The SD card is already installed at the factory and must not be removed or plugged in during operation. POS-Line VideoPoster will not work without SD card.

Supported media formats

Video:

- MPEG-4 AVC / H.264
- Windows Media Video (WMV)
- Quicktime
- Flash Video
- MPEG Transport Stream

Still images:

- PNG
- JPG
- BMP

Functional description

POS-Line VideoPoster is a networked stand alone media player to playback play lists. Operating systems or other client-based software components are not required. Play lists are based on a XML structure and can include videos and images. The media player controlls the play list. A play list is looped endlessly until a new play list is loaded or the player is switched off. A play list may contain several sub play lists which can be triggered by an internal timer or other external events like push buttons or proximity switches (optional external I/O board).

POS-Line VideoPoster does not need any local operation. As soon as a play list is loaded, the media player will automatically start with playback. Power can be switched off at any time, a shut down procedure is not required. After power on, the media player will automatically playback the current play list.

Connecting an external source with priority

An external source like video player or sat receiver can be connected to the POS-Line VideoPoster via HDMI. If priority of the HDMI connector has been activated, the playback of the play list will stop as soon as a HDMI signal is detected. In this case, the HDMI signal is shown on the screen. If the external player is switched off, the media player will automatically start or continuing playing back the internally stored play list.

Software

The attached CD contains the following software and documentation:

ACC: Windows software to create play lists for POS-Line VideoPoster devices. Use ACC to transfer play lists to VideoPoster, and to store play lists on USB sticks for manual transfer.

ADF: Windows software to support installation and configuration of VideoPoster devices. Connect your POS-Line VideoPoster as shipped (factory configuration) to the network. ADF will detect all VideoPosters and allow an easy configuration of the network parameters.

Downloading play lists

There are basically four methods to download play lists:

Via USB: Store the play list on a USB stick and insert the USB stick into the USB port of the display. The play list is automatically copied to the SD card and playback starts immediately.

Via ACC: This is a free software for Windows to create play lists and to upload play lists to one or more media player in the network.

Via FTP-Server: POS-Line VideoPoster will connect to the FTP server in configurable time intervals. If a new content is detected, the difference to the existing play list is copied to the SD card and playback starts automatically.

Via HTTP-Protocol: Use HTTP protocol to transfer and control POS-Line VideoPoster from any existing Content Management System.

Configuration

Use any Internet browser like Firefox, Internet Explorer, Chrome, etc. for the configuration of the POS-Line VideoPoster. Enter the URL (i.e. IP address or network device name) to open the device's web interface. Please enter the password if required (factory settings: Login name: Artista; Password: Artista).

Layout of the web interface:

Information

System Information:	Here you can find all the information about the system like software revision. In case of a support request please add a printout of this page to your mail for a fast processing.
View Logs:	POS-Line VideoPoster creates log files to allow an easy monitoring of operations. The following log files are available: Player – shows the log file of the video player and error messages. Updater – shows the log file of content updates and error messages. Setup Manager – shows the list of executed setup files. Event Manager – shows error messages of the event manager.

Configuration

Network Configuration:	This page includes all entries for the network configuration. Click on „Submit Configuration" to store the settings and change the configuration. Clicking on „Reset Configuration" deletes all entries in the web page but does not change the configuration.
Date and Time:	Enter date, time and time zone. Enter a network time server for automatic synchronization (NTP).
Content Auto Update:	To configure automatic content updates with FTP server, enter the FTP server access information and update time interval here.
Audio Settings:	Volume settings for speakers.
Display Settings:	Panel brightness settings.
HTTP Access:	Enter password. It is recommended to change the password after installation.
Advanced:	Firmware updates, SD card formating,reset of hardware configuration to factory defaults and priority setting for HDMI input.

Restart

Restart:	Media player restart.

On-screen display of IP-address and host name

IP-address and host name are shown on the screen for 5 seconds during the boot process.

14. Touch Sensors

POS-Line monitors are available with touch option. Depending on the panel size, different touch systems and touch technologies are used.

If the monitor has been ordered with touch option, the touch sensor and touch controller are installed. The actual touch driver is pre-installed on IQ Ontario systems if ordered with operating system.

Note: A CD with the latest touch driver (if a driver is required) is included in the packet.

The following table gives an overview of the touch systems including web addresses for driver downloads. HID devices do not need drivers for Windows 7 and 8. Please contact our support center if you are using LINUX based computers.

Touch system overview:

Panel size	Touch technology	Manufacturer	Type	Driver download
10.4"	5-wire resistive	ABON	A-151040302	Http://home.eeti.com.tw/web20/eg/Touch_Drives.html
15"	5-wire resistive	ABON	A-15150-0302	Http://home.eeti.com.tw/web20/eg/Touch_Drives.html
17"	5-wire resistive	ABON	A-15170-0302	http://home.eeti.com.tw/web20/eg/Touch_Drives.html
17.3"	P-CAP	DMC	TP-4284S1F0	HID device for WIN7/8, other at www.distec.de
	5-wire resistive	DD-Group	TP-DD1730-A01	HID device for WIN7/8, other at www.distec.de
19"	5-wire resistive	ABON	A-15190-0303	http://home.eeti.com.tw/web20/eg/Touch_Drives.html
23"	AMR	eTurbo	SR-30M182235D6	HID device, no driver required for Windows

15. General Product Information

Display Quality - Prevention of after image burn in effects

After image burn-in means that an image or part of an image (i.e. logo) remains visible on the screen even if the image on the screen is changed. This should not occur if the LCD panel is operated in normal conditions with changing content. To prevent burn-in effects please follow the following guidelines.

- Do not display fixed patterns for an extended time period of more then 12 hours.
- Power-off the monitor for 4 hours after using it for 20 hours, and for 2 hours after using it for 12 hours.
- Use the power scheme and power management of the PC.
- Use plain-colored screen savers.
- Avoid patterns with a strong difference in brightness and contrast.
- Avoid gray colors.
- Change images and logos regularly. Show animated pictures for 60 seconds after 4 hours of operation.
- The best way to protect your display is to switch the monitor off when not in use or to use screen savers.

Non-observance of these guidelines may have effects on warranty.

16. Maintenance

Systems with active cooling require cleaning of ventilation slots every 6 months. Systems with passive cooling must be cleaned every 12 months.

17. Guarantee / Service

Guarantee

Data Display Group grants a manufacturer's guarantee of two years from the date of delivery.

The rendering of guarantee claims shall neither extend nor restart the guarantee period.

During the guarantee period, Data Display Group shall repair product faults based on material or production defects. The guarantee service is executed at Data Display Group's discretion through repair, replacement of defective parts or by exchanging a product for a product of equal quality without charging the customer for material or labor.

Guarantee claims are only accepted, if Data Display Group receives notification of a defective product within the guarantee period and the product is presented to the Data Display Group Service Centre together with all information as specified in the RMA process.

Guarantee Exclusions and Limitations

This guarantee does not apply to any defect for which Data Display group is not responsible and which includes, but is not limited to the following:

- Unauthorized opening or disassembling of the product
- Faulty maintenance by non-observation of maintenance instructions
- Inappropriate storage or cleaning of the product
- Unauthorized modification of the product
- Incorrect use or misuse
- Non-observation of operating and installation instructions
- Permanent display of fixed images (causing image retention or image sticking)
- Operating the product in conditions which exceed the limitations of the specification
- Use of inappropriate boxes, packaging or modes of shipment
- Force majeure like fire, acts of war, acts of violence, chemical or biological impacts, lightning strikes, over voltage or similar events
- Fault resulting from the use of software which was not originally supplied with the product or which is incorrectly installed
- Normal wear and tear and wearing parts (i.e. LCD panel)

Mechanical damages like scratches, pressure or break points are excluded from this guarantee.

This guarantee does not include accessory parts which are not integral part of the product (as boxes, batteries).

Pixel errors only constitute a fault under the terms of this guarantee if they deviate from the product specification (i.e. ISO 9241-307 pixel failure class II).

Guarantee Processing

Group RMA process. In order to avoid unnecessary charges, it is important to adhere to the RMA regulations.

Products must be appropriately and professionally packed for a safe return to the Data Display Group Service Centre. Products with panel sizes equal or larger then 81 cm (32") must be shipped on pallets in upright position.

Data Display Group does not assume liability for any customer data stored on products which are returned to Data Display Group.

Limitations of Liability and Benefits

With this guarantee declaration, Data Display Group exclusively guarantees that the product is free of material and manufacturing faults.

Data Display Group does not issue any other guarantee or similar statements other than this declaration.

This guarantee does not impair or affect a buyer's statutory claim against the seller due to material damage. Such claims can be asserted instead of the guarantee agreed to here at the buyer's discretion.

Mandatory legal rights and mandatory claims under the German Product liability remain unaffected.

Applicable Law and Place of Jurisdiction

The laws of the Federal Republic of Germany apply.

Place of jurisdiction is Munich.

Service addresses

Germany

Distec GmbH
Augsburger Str. 2b
D-82110 Germering
☎ +49 (0)89 / 89 43 63 0
✉ support@distec.de

England

Display Technology Ltd.
5 The Oaks Business Village
Revenge Road, Lordswood
Chatham, Kent, ME5 8LF
☎ +44 (0)16 34 / 67 27 55
✉ info@displaytechnology.co.uk

USA

Apollo Corp.
87 Raynor Avenue, Unit 1
Ronkonkoma NY 11779
☎ +1 (1)631 / 580-4360
✉ info@apollodisplays.com

Please go to the following web address for further information about our RMA regulations and RMA forms:

Http://www.datadisplay-group.com/service

18. Correct disposal of batteries

Applicable in all countries of the EU and in countries with separate battery collection systems.

The Batteries in this product should not be disposed with other household waste. The chemical symbol Pb, CD or Hg indicate that the battery contains lead, cadmium or mercury above the reference level in EC directive 2006/66.

Batteries which are not disposed correctly can cause harm environment and health.

Our environment is close to our hearts. Please help us to protect our environment and recycle empty batteries with the free battery collection system.